Comment on "Roles of certain biochemical and hematological parameters in predicting mortality and ICU admission in COVID-19 patients"

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Dear Editor,

We were very pleased to read the article "Roles of certain biochemical and hematological parameters in predicting mortality and ICU admission in COVID-19 patients" by Bilgir and colleagues[1]. In the study, the authors revealed that the most effective parameters to predict intensive care unit admission and mortality in COVID-19 patients are ferritin, lactate dehydrogenase, D-dimer, C-reactive protein, red cell distribution width, and creatinine. This study provides very valuable insight for preventing the COVID-19 pandemic. However, some concerns should be raised from our point of view.

First, there is an apparent age difference in this study. The mean age was 56.0±18.5 years, where the youngest was 18 and the oldest was 96 years old. Thus, age-stratified analysis could reduce the impact of age on the results. In contrast, gender of patients also affected intensive care unit admission and mortality in the COVID-19 patients.

Second, several statistical tests are described separately under the Statistical analysis section in Methods. However, the specific statistical analysis cannot be found, for instance, use of the Pearson's χ^2 or Fisher's exact χ^2 test in the Results section and corresponding figure legends. To further explore the potential risk factors for mortality, multivariable Cox regression analysis with backward-stepwise selection could be used to identify the predictors of mortality in the COVID-19 patients.

AUTHORS' CONTRIBUTIONS

LL: Data curation, Formal Analysis, Writing – original draft.
XL: Conceptualization, Writing – review & editing.

REFERENCE

1. Bilgir F, Çalık Ş, Demir I, Bilgir O. Roles of certain biochemical and hematological parameters in predicting mortality and ICU admission in COVID-19 patients. Rev Assoc Med Bras (1992). 2021;67(Suppl 1):67-73. https://doi.org/10.1590/1806-9282.67.Suppl1.20200788

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